white, or cream-colour of the lower part of the throat extends in a narrow line across the back of the neck.

TROCHILUS FLAVICAUDATUS. T. rostro quàm caput duplò longiore et arcuato; caudd mediocri: capitis vertice obscure fusco; corpore suprà aureo-viridi, corpore subtàs ochreo; gulæ plumis punctis aureis et cupreis; pectoris lateribus maculis aureo-viridibus, ornatis; crisso pallidè ochreo; rectricibus caudæ duabus intermediis aureo-viridibus, reliquis ochreis, apicibus viridibus; remigibus alarum obscuris, purpureo relucentibus; rostro nigro; pedibus suprà nigrescentibus, subtàs pallidis.

Long. tot.  $4\frac{3}{4}$  unc.; rostri,  $1\frac{1}{8}$ ; alæ,  $2\frac{1}{2}$ ; caudæ,  $1\frac{3}{4}$ .

TROCHILUS MELANOGENYS. T. rostro quàm caput vix longiore; caudd sub-brevi, rectricibus mediocriter latis, et acutis: capite et corpore suprà aureo-viridibus; corpore subtàs ex-ochreo-albo; abdominis lateribus rufo lavatis; genis nigris; lined flavescentialbd pone oculos; plumis gulæ singulis notd ad apicem nigrd, notis lineas longitudinales efficientibus; abdomine, obscurè, aureo-viridi guttato; caudá suprà nigrescente, æneo tinctd, apicem versus nigrd purpureo relucente, et rectricibus flavescenti-albo, duabus intermediis exceptis, terminatis; alis obscuris, violaceo relucentibus; mandibulæ inferioris basi, pedibusque flavis.

Long. tot.  $3\frac{3}{4}$  unc.; rostri,  $\frac{3}{4}$ ; alæ,  $3\frac{3}{4}$ ; caudæ,  $1\frac{3}{8}$ .

TROCHILUS TYRIANTHINUS, Loddiges' MSS. T. rostro acuto, caput longitudine æquante; caudd mediocri, vix furcatd; rectricibus latissimis: capite, corporeque suprà, aureo-viridibus; sic et corpore subtùs, at ochreo variegato; guld nitente, et intensè viridi; rectricibus caudæ suprà æneo-viridibus, ex-aureo, et cupreo relucentibus, subtùs, cupreis, aureo nitentibus; alis obscuris; rostro pedibusque nigris.

Fæm: gulá e castaneo flavá; abdomine albo, ochreo lavato; singulis

plumis notd aureo-viridi.

Long. tot. 4 unc.; rostri,  $\frac{1}{2}$ ; alæ,  $2\frac{1}{8}$ ; caudæ,  $1\frac{3}{8}$ .

### MISCELLANEOUS.

NOTICE OF A SPECIES OF WARBLER NEW TO BRITAIN.

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Long. tot.  $4\frac{3}{4}$  unc.; rostri,  $1\frac{1}{8}$ ; alæ,  $2\frac{1}{2}$ ; caudæ,  $1\frac{3}{4}$ .

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Long. tot.  $3\frac{3}{4}$  unc.; rostri,  $\frac{3}{4}$ ; alæ,  $3\frac{3}{4}$ ; caudæ,  $1\frac{3}{8}$ .

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Fæm: gulá e castaneo flavá; abdomine albo, ochreo lavato; singulis

plumis notd aureo-viridi.

Long. tot. 4 unc.; rostri,  $\frac{1}{2}$ ; alæ,  $2\frac{1}{8}$ ; caudæ,  $1\frac{3}{8}$ .

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Long. tot.  $3\frac{3}{4}$  unc.; rostri,  $\frac{3}{4}$ ; alæ,  $3\frac{3}{4}$ ; caudæ,  $1\frac{3}{8}$ .

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Fæm: gulá e castaneo flavá; abdomine albo, ochreo lavato; singulis

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mentioned person last spring in the fens of Cambridgeshire; these were all that were procured.

The following is a short specific description:—

Sylvia luscinioides, Savi (Pseudoluscinia Savi, Bonap.).

General colour above castaneous brown, with the tail very inconspicuously barred with darker; line over the eyes, breast, sides and under tail-coverts paler than the upper parts; throat and middle of the abdomen albescent, the former slightly spotted triangularly with darker. The first quill very short, and the second longest of all. Upper mandible brown, lower and feet yellowish brown.

Total length,  $5\frac{1}{4}$ ; bill,  $\frac{8}{12}$ ; wings,  $2\frac{1}{2}$ ; tail,  $2\frac{1}{4}$ ; tarsi,  $\frac{9}{2}$ .

### PHYSOPHORES.

Mr. Milne Edwards believes that these are not single animals, but the aggregation of a great number of individuals growing by buds, and living united together like the compound *Polypes.—Edwards*, Ann. Sc. Nat. 1840.

#### ECHINIDÆ.

Mr. M. Edwards and Dr. Peters have discovered that the *Echinida* are of separate sexes: the testicles differ little from the ovaries, but they contain a white milky fluid, while that of the ovaries is orange.

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### CARINARIA.

According to Mr. Edwards, the nervous system is much more complicated than in any other Gasteropodes; besides the labial ganglions, the cerebral, and the subcesophageal, there are a pair of optic ganglions, a pair of ophthalmic, a pair of hepatic and a subanal ganglion. Lastly, they have stomato-gastric nerves analogous to those which have been observed in Crustacea, and in many other invertebrated animals.—Ann. Sc. Nat. 1840, p. 196.

### HISTORY OF MOLLUSCA.

M. De Blainville has lately published some extracts from M. Dufo's observations on the habits of mollusca; in which he remarks that this gentleman has observed that the eggs of Achatina Mauritiana are disposed in the form of a column, forming a more or less lengthened series; that Helix unidentata and H. Studmanni are ovoviviparous; that some species of Calyptraa are provided with a support distinct from the rock on which they are placed; that Hipponyx sometimes hollows out the surface of the bodies to which it is attached; and that the Byssiferous bivalves sometimes detach their byssus thread by thread. These remarks with regard to the Calyptraa are very interesting, as showing the affinity of the animal to the Hipponyces, which have been proposed to be placed with the bivalves. The observations with respect to ovoviviparousness of some Helices and the habits of the Hipponyces are not new to English malacologists.—J. E. Gray.

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### THE GENUS BROCCHIA OF BRONN.

In the Philosophical Transactions for 1833, p. 78, I stated that I believed that this genus had been established on specimens of Capuli that had been affixed to radiated shells. M. Philippi, in his excellent work on Sicilian Shells, observes, "Non in testa plicata differentiam genericam quæsivit cl. Bronn, sed in sinu laterali, et Brocchia eodem charactere a Capulis quo Siphonaria a Patellis differt," p. 119. On re-examination of the species I find nothing to distinguish it from Capulus but the lateral notch, which varies greatly in size in the different specimens, and appears to be formed by attachment to some extraneous body. M. Philippi however copies Professor Bronn's character without discovering that it contains two very obvious inaccuracies, which, if they were true, would at once separate the genus from Capulus and all the other known Molluscous genera: for he says, "Impressio muscularis elongata arcuata transversa intus ad limbum anticum." Now I know no univalve shell that has the muscular scar on the front of the mouth! The fact is, that the Professor has mistaken the front of the shell for the back, and this has led to the other mistake; for he describes the mouth thus, "apertura subrotunda, margo sinister sinu amplo excisus," whereas the nick is not on the left but always on the right side of the shell when present. I may further observe, that the right limb of the muscular impression behind the neck is much shorter than the left; or rather, the apex of the shell, which in Pileopsis hungaricus is nearly in the centre of the back of the shell, is in P. sinuosa on the right side of the back. The shell is dextral, though it has at first sight the appearance of being sinistral.—J. E. GRAY.

# "THE SEXES OF LIMPETS. PATELLE."

In the last Number (p. 70.) Dr. Wagner refers to the fact of the *Patella* being unisexual as a discovery of his own. It will be found stated with more detail in the first volume of the Annals, p. 482.—
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#### THE EXHIBITION OF FISHES IN MUSEUMS.

In the Royal Museum of Vienna, where they have the best-preserved and exhibited collection of fishes that I have ever seen in any public Museum, the specimens are kept in shallow cases about six or eight inches deep, and are suspended by a wire loop which is inserted into the back of the specimens just before the front of the dorsal fin. If the specimen is long and heavier behind, so that it will not keep its position, there is driven in a small pin just beneath the lower side of the base of the tail to support it. In this manner the fishes appear in the attitude of swimming, and their names are easily attached to the back of the case beneath them; they are also easily taken off the pin to which the loop is suspended, if necessary for examination.—J. E. Gray.

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# MR. HECKL'S METHOD OF CLOSING GLASS JARS.

The specimens of fish in the Museum of Vienna which are kept in spirits are inclosed in glass jars covered with a flat glass disc; these discs are made at the same time as the bottles and sent in with them from the Bohemian glass-houses. They and the surface of the lips of the jars are ground together so as exactly to fit each other, and they have an oblique edge shelving towards the inner side, so that when they are placed on the top of the jar there is a small triangular space all round between the upper edge of the disk and the upper outer edge of the lip of the jar, which is left to hold a quantity of the composition by which they are luted. This composition consists of six ounces of white wax and three drachms each of spermaceti and hog's lard mixed together; and Mr. Heckl, who has made many experiments, assured me, that if it was well applied between the two surfaces and filled into the triangular space above referred to, not the least evaporation was observable in bottles that had been set aside for the purpose for more than two years, though some of them had been set upside down to bring the spirit in connexion with the mixture. Indeed so much confidence has Mr. Heckl in the method, that he has had the disk pierced with a small central slit to enable him to support his specimens with silk, only having a small concavity ground out of the upper surface of the disk round the hole, which he fills with this composition. There is a specimen jar of the kind in the British Museum.—J. E. GRAY.

# STANDS FOR BIRDS, &c.

In the Vienna Museum the newer specimens of Birds and the smaller mammalia are placed on stands with oval bases; this is far superior to the round or square bases which are usually adopted in English and French collections, as it gives a larger space for the label without occupying more room, which is often much wanted, and at the same time prevents the birds being knocked against each other by accident.—J. E. Gray.

### THE GENUS GYNAMEDA, GRAY.

The body which I described under this head in Proceedings of the Zoological Society, is evidently only the basal joint of the body of the English species of Comatula, the impressed dots on the convex part being the scars left by the dorsal claspers; and the single opening and the cavity in the flat part are doubtless analogous to the roundish or five-rayed cavity in the joints of the stem of the Enirmitis. This fact I have verified by comparing the specimens I described with one of those joints separated from a complete specimen, but it is curious how the two specimens which were described should have been found so completely isolated in the sand; for I had great difficulty, even after soaking the specimen in water for some days,

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The specimens of fish in the Museum of Vienna which are kept in spirits are inclosed in glass jars covered with a flat glass disc; these discs are made at the same time as the bottles and sent in with them from the Bohemian glass-houses. They and the surface of the lips of the jars are ground together so as exactly to fit each other, and they have an oblique edge shelving towards the inner side, so that when they are placed on the top of the jar there is a small triangular space all round between the upper edge of the disk and the upper outer edge of the lip of the jar, which is left to hold a quantity of the composition by which they are luted. This composition consists of six ounces of white wax and three drachms each of spermaceti and hog's lard mixed together; and Mr. Heckl, who has made many experiments, assured me, that if it was well applied between the two surfaces and filled into the triangular space above referred to, not the least evaporation was observable in bottles that had been set aside for the purpose for more than two years, though some of them had been set upside down to bring the spirit in connexion with the mixture. Indeed so much confidence has Mr. Heckl in the method, that he has had the disk pierced with a small central slit to enable him to support his specimens with silk, only having a small concavity ground out of the upper surface of the disk round the hole, which he fills with this composition. There is a specimen jar of the kind in the British Museum.—J. E. GRAY.

# STANDS FOR BIRDS, &c.

In the Vienna Museum the newer specimens of Birds and the smaller mammalia are placed on stands with oval bases; this is far superior to the round or square bases which are usually adopted in English and French collections, as it gives a larger space for the label without occupying more room, which is often much wanted, and at the same time prevents the birds being knocked against each other by accident.—J. E. Gray.

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Halifax, Sept. 16, 1840.

# METEOROLOGICAL OBSERVATIONS FOR AUG. 1840.

Chiswick.—Aug. 1, 2. Very fine. 3—9. Hot and dry. 10. Very fine. 11. Showery. 12. Cloudy: rain. 13. Cloudy. 14. Rain. 15. Very fine: showery. 16. Fine. 17. Boisterous with heavy rain. 18. Cloudy. 19. Heavy rain: cloudy and fine. 20. Fine. 21. Foggy: very fine. 22. Foggy. 23—26. Very fine. 27. Foggy: fine. 28. Slight fog: rain. 29. Foggy. 30, 31. Cloudy and fine. The mean temperature of the month was nearly 2° above the average.

Boston.—Aug. 1—3. Fine. 4. Cloudy. 5—10. Fine. 11. Rain. 12, 13. Fine. 14. Cloudy. 15. Stormy: rain r.m. 16. Fine. 17. Stormy: rain early A.M.: rain with thunder and lightning P.M. 18. Stormy. 19, 20. Cloudy. 21. Fine: quarter past three P.M. thermometer 80°. 22. Cloudy: rain P.M.: lightning at night. 23, 24. Fine. 25. Fine: rain P.M. 26, 27. Cloudy. 28. Fine. 29. Cloudy. 30. Fine: rain P.M. 31. Cloudy: rain A.M.

N.B. The warmest August since 1826.

Applegarth Manse, Dumfries-shire.—Aug. 1, 2. Very fine. 3. Mild: showery A.M. 4. Fine. 5. Sultry. 6. Sultry: heat oppressive. 7—9. Sultry. 10. Wet and boisterous P.M. 11. Showery. 12—14. Occasional showers. 15. Fair throughout. 16. Much rain P.M. 17. Heavy rain: thunder: high flood. 18. 21. Fine : rain r.m. 12. Fine, with one slight shower. 20. Drizzling all day. 21. Fine : rain r.m. 22, 23. Fine and fair all day. 24, 25. Showery. 26. Fair all day and clear sky. 27. Wet r.m. 28. Fair all day. 29. Drizzling all day. 30. Fine and fair all day. 31. Remarkably fine harvest day. Sun shone out 27 days. Rain fell 15 days. Thunder I day. Wind north-west 5 days. East-south-ceast I day. South-west 4½ days. South-

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